

【What is claimed is】

【Claim 1】

A support system for a power train of a forklift in a support structure for the power train of the forklift having a counterweight in the rear part of a body frame, characterized in that while a front side support is provided at one location positioned at a differential gear case or a frame side cross member and in the vicinity of the roll axis of the power train, a rear side support is provided at two locations, on the right and left sides of the roll axis of the power train, respectively, in the rear part of the body frame, thereby supporting the power train at three locations in all.

【Claim 2】

A support system for a power train of a forklift according to claim 1, characterized in that right and left supports serving as the rear side supports of the power train are disposed so as to form a V-shaped mount structure in the rear part of the body frame.

【Claim 3】

A support system for a power train of a forklift according to claims 1 or 2, characterized in that a support member installation face disposed horizontally is provided on the upper surface of the differential gear case, and a bracket having a support member installation face disposed horizontally, opposite to the support member installation face, in the vertical direction, is fixed to a front face wall of a transmission case, in the vicinity of the roll axis of the power train, a support member of the power train, having vibration isolation members being disposed between the two support member installation faces.

【Claim 4】

A support system for a power train of a forklift according to claim 3, characterized in comprising a lower plate having a crest formed by protruding the center thereof upward in an inverted-V

shape, flat parts provided with an installation hole, respectively, at both ends thereof, on the right and left skirts thereof, away from the crest, a slope slanting downward extending the crest protruded upward in the inverted-V-shape with each of the both ends of the lower plate, on the right and left skirts thereof, away from the crest, and a fixture portion for a vibration isolation member, provided on the outer surfaces of the slopes on the right and left sides, respectively; an upper plate having a flat crest formed at the center thereof, slopes extending from the flat crest and slanting downward to the right and left sides, respectively, the slopes on the right and left sides, respectively, being formed so as to be in parallel with the slopes formed on the right side and the left side, respectively, of the crest of the lower plate, protruded upward in the inverted-V shape, a fixture portion for a vibration isolation member served by each of the inner surfaces of the slopes on the right and left sides, respectively, parallel with the respective slopes of the lower plate, and an installation bolt protruding upward, fixed to the center of the upper plate, wherein the lower plate is integrated with the upper plate at the respective fixture portions for the vibration isolation members through the respective vibration isolation members.

【Claim 5】

A support system for a power train of a forklift according to claim 4, characterized in that the vibration isolation member is fixed to the respective outer surfaces of the slopes formed on the right side and the left side of the crest of the lower plate, protruded upward in the inverted-V shape, the flat crest is formed at the center of the upper plate, the slopes extending from the flat crest and slanting downward to the right and left sides, respectively, are formed, those slopes are formed so as to be in parallel with the slopes formed on the right side and the left side, respectively, of the crest of the lower plate, protruded upward in the inverted-V shape, the outer surface of the vibration

isolation member fixed to the respective outer surfaces of the slopes of the lower plate is fixed to the respective inner surfaces of the slopes, on the right side and the left side, in parallel with the slopes of the lower plate, the installation bolt protruding upward is fixed to the center of the upper plate, and further, over the outer surface of the upper plate, a back-and-forth direction stopper plate, in substantially the letter U, is disposed in a direction crossing the outer surface of the upper plate, and apart by a predetermined distance from a back-and-forth direction stopper vibration isolation member, formed by vulcanizing on the both end portions and the inner surface as well as the outer surface of the crest of the lower plate, protruded upward in the inverted-V shape, around the edges of back-and-forth ends thereof, to the outer surface thereof, thereby inserting the installation bolt fixed to the underside of the upper plate into a through-hole for the installation bolt, provided at the center of the back-and-forth direction stopper plate, in substantially the letter U, to be securely held together with the bracket fixed to the front face wall of the transmission case by tightening up nuts.